

## COMBINED DECLARATION AND POWER OF ATTORNEY

(ORIGINAL, DESIGN, NATIONAL STAGE OF PCT, SUPPLEMENTAL, DIVISIONAL,  
CONTINUATION OR C-I-P)

As a below named inventor, I hereby declare that:

### TYPE OF DECLARATION

This declaration is of the following type:

(check one applicable item below)

☒ original.

☐ design.

☐ supplemental.

NOTE: IF THE DECLARATION IS FOR AN INTERNATIONAL APPLICATION BEING FILED AS A DIVISIONAL, CONTINUATION OR CONTINUATION-IN-PART APPLICATION, DO NOT CHECK NEXT ITEM; CHECK APPROPRIATE ONE OF LAST THREE ITEMS.

☐ national stage of PCT.

NOTE: IF ONE OF THE FOLLOWING 3 ITEMS APPLY, THEN COMPLETE AND ALSO ATTACH ADDED PAGES FOR DIVISIONAL, CONTINUATION OR C-I-P.

☐ divisional.

☐ continuation.

☐ continuation-in-part (C-I-P).

### INVENTORSHIP IDENTIFICATION

WARNING: IF THE INVENTORS ARE EACH NOT THE INVENTORS OF ALL THE CLAIMS, AN EXPLANATION OF THE FACTS, INCLUDING THE OWNERSHIP OF ALL THE CLAIMS AT THE TIME THE LAST CLAIMED INVENTION WAS MADE, SHOULD BE SUBMITTED.

My residence, post office address and citizenship are as stated below, next to my name. I believe that I am the original, first and sole inventor (IF ONLY ONE NAME IS LISTED BELOW) or an original, first and joint inventor (IF PLURAL NAMES ARE LISTED BELOW) of the subject matter that is claimed, and for which a patent is sought on the invention entitled:

### TITLE OF INVENTION

### REACTION AND SEPARATION METHODS

**SPECIFICATION IDENTIFICATION**

the specification of which:

(complete (a), (b) or (c))

(a) ☒ is attached hereto.

(b) ☐ was filed on \_\_\_\_\_, as ☐ Serial No. \_\_\_\_\_  
or ☐ Express Mail No. \_\_\_\_\_, as Serial No. not yet known  
and was amended on \_\_\_\_\_ (IF APPLICABLE).

NOTE: AMENDMENTS FILED AFTER THE ORIGINAL PAPERS ARE DEPOSITED WITH THE PTO  
THAT CONTAIN NEW MATTER ARE NOT ACCORDED A FILING DATE BY BEING  
REFERRED TO IN THE DECLARATION. ACCORDINGLY, THE AMENDMENTS INVOLVED  
ARE THOSE FILED WITH THE APPLICATION PAPERS OR, IN THE CASE OF A  
SUPPLEMENTAL DECLARATION, ARE THOSE AMENDMENTS CLAIMING MATTER NOT  
ENCOMPASSED IN THE ORIGINAL STATEMENT OF INVENTION OR CLAIMS. SEE 37  
CFR 1.67.

(c) ☐ was described and claimed in PCT International Application No. \_\_\_\_\_  
and as amended under PCT Article 19 on \_\_\_\_\_ (IF ANY).

**ACKNOWLEDGEMENT OF REVIEW OF PAPERS AND DUTY OF CANDOR**

I hereby state that I have reviewed and understand the contents of the  
above-identified specification, including the claims, as amended by any  
amendment referred to above.

I acknowledge the duty to disclose information, which is material to  
patentability as defined in 37, Code of Federal Regulations, S 1.56,

(also check the following items, if desired)

☒ and which is material to the examination of this application,  
namely, information where there is a substantial likelihood that a  
reasonable Examiner would consider it important in deciding whether  
to allow the application to issue as a patent, and

☐ in compliance with this duty, there is attached an information  
disclosure statement, in accordance with 37 CFR 1.98.

**PRIORITY CLAIM (35 U.S.C. S 119(a)-(d))**

I hereby claim foreign priority benefits under Title 35, United States Code,  
S 119(a)-(d) of any foreign application(s) for patent or inventor's  
certificate or of any PCT international application(s) designating at least  
one country other than the United States of America listed below and have also  
identified below any foreign application(s) for patent or inventor's  
certificate or any PCT international application(s) designating at least one  
country other than the United States of America filed by me on the same  
subject matter having a filing date before that of the application(s) of which  
priority is claimed.

(complete (d) or (e))

(d) ☒ no such applications have been filed.

(e) ☐ such applications have been filed as follows.

NOTE: WHERE ITEM (C) IS ENTERED ABOVE AND THE INTERNATIONAL APPLICATION  
WHICH DESIGNATED THE U.S. ITSELF CLAIMED PRIORITY CHECK ITEM (E),  
ENTER THE DETAILS BELOW AND MAKE THE PRIORITY CLAIM.

PRIOR FOREIGN/PCT APPLICATION(S) FILED WITHIN 12 MONTHS  
(6 MONTHS FOR DESIGN) PRIOR TO THIS APPLICATION  
AND ANY PRIORITY CLAIMS UNDER 35 U.S.C. S 119(a) - (d)

COUNTRY (OR INDICATE IF PCT)	APPLICATION NUMBER	DATE OF FILING (day, month, year)	PRIORITY CLAIMED UNDER 37 USC 119
			[ ] YES NO [ ]
			[ ] YES NO [ ]
			[ ] YES NO [ ]
			[ ] YES NO [ ]
			[ ] YES NO [ ]

CLAIM FOR BENEFIT OF PRIOR U.S. PROVISIONAL APPLICATION(S)  
(34 U.S.C. S 119(e))

I hereby claim the benefit under Title 35, United States Code, S 119(e) of any United States provisional application(s) listed below:

PROVISIONAL APPLICATION NUMBER	FILING DATE
_____/_____	_____
_____/_____	_____
_____/_____	_____

CLAIM FOR BENEFIT OF EARLIER US/PCT APPLICATION(S)  
UNDER 35 U.S.C. 120

- [ ] The claim for the benefit of any such applications are set forth in the attached ADDED PAGES TO COMBINED DECLARATION AND POWER OF ATTORNEY FOR DIVISIONAL, CONTINUATION OR CONTINUATION-IN PART (C-I-P) APPLICATION.

ALL FOREIGN APPLICATION(S), IF ANY, FILED MORE THAN 12 MONTHS  
(6 MONTHS FOR DESIGN) PRIOR TO THIS U.S. APPLICATION

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NOTE: IF THE APPLICATION FILED MORE THAN 12 MONTHS FROM THE FILING DATE OF THIS APPLICATION IS A PCT FILING FORMING THE BASIS FOR THIS APPLICATION ENTERING THE UNITED STATES AS (1) THE NATIONAL STAGE, OR (2) A CONTINUATION, DIVISIONAL, OR CONTINUATION-IN-PART, THEN ALSO COMPLETE ADDED PAGES TO COMBINED DECLARATION AND POWER OF ATTORNEY FOR DIVISIONAL, CONTINUATION OR C-I-P APPLICATION FOR BENEFIT OF THE PRIOR U.S. OR PCT APPLICATION(S) UNDER 35 U.S.C. S 120.

**POWER OF ATTORNEY**

I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith.

**Henry E. Bartony, Jr., Reg. No. 34,772**

(check the following item, if applicable)

[ ] Attached, as part of this declaration and power of attorney, is the authorization of the above-named attorney(s) to accept and follow instructions from my representative(s).

**SEND CORRESPONDENCE TO**

Henry E. Bartony, Jr.  
Suite 1801  
Law & Finance Building  
429 Fourth Avenue  
Pittsburgh, PA 15219

**DIRECT TELEPHONE CALLS TO:**

Henry E. Bartony, Jr.  
Tel (412) 338-8632  
Fax (412) 338-6611

**DECLARATION**

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

**SIGNATURE(S)**

NOTE: Carefully indicate the family (or last) name, as it should appear on the filing receipt and all other documents.

Full name of sole or first inventor

Dennis P. Curran  
(GIVEN NAME) (MIDDLE INITIAL OR NAME) FAMILY (OR LAST NAME)

Inventor's signature \_\_\_\_\_

Date \_\_\_\_\_ Country of Citizenship USA

Residence 506 S. Linden Avenue, Pittsburgh PA 15208 USA

Post Office Address 506 S. Linden Avenue, Pittsburgh PA 15208 USA

\*\*\*\*\*

Full name of second joint inventor, if any

Oscar de Frutos Garcia  
(GIVEN NAME) (MIDDLE INITIAL OR NAME) FAMILY (OR LAST NAME)

Inventor's signature \_\_\_\_\_

Date \_\_\_\_\_ Country of Citizenship Spain

Residence 4609 Bayard St., King Edwards Apt #771, Pittsburgh, PA 15213 USA

Post Office Address: 4609 Bayard St., King Edwards Apt #771,  
Pittsburgh, PA 15213 USA

\*\*\*\*\*

Full name of third joint inventor, if any

Yoji Oderaotoshi  
(GIVEN NAME) (MIDDLE INITIAL OR NAME) FAMILY (OR LAST NAME)

Inventor's signature \_\_\_\_\_

Date \_\_\_\_\_ Country of Citizenship Japan

Residence: 201 Highroofshirakibaru, 1-12-13, Chuou, Onojou, Fukuoka, 816-0942 Japan

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816-0942 Japan

(check proper box(es) for any of the following added page(s)  
that form a part of this declaration)

- ☐ Signature for fourth and subsequent joint inventors. NUMBER OF PAGES  
ADDED \_\_\_\_\_.

\* \* \*

- ☐ Signature by administrator(trix), executor(trix) or legal  
representative for deceased or incapacitated inventor. NUMBER OF  
PAGES ADDED \_\_\_\_\_.

\* \* \*

- ☐ Signature for inventor who refuses to sign or cannot be reached by  
person authorized under 37 CFR 1.47. NUMBER OF PAGES ADDED  
\_\_\_\_\_.

\* \* \*

- ☐ Added page for signature by one joint inventor on behalf of deceased  
inventor(s) where legal representative cannot be appointed in time.  
(37 CFR 1.47)

\* \* \*

- ☐ Added pages to combined declaration and power of attorney for  
divisional, continuation, or continuation-in-part (C-I-P)  
application.

☒ Total Number of pages added \_\_\_\_\_

\* \* \*

- ☐ Authorization of attorney(s) to accept and follow instructions from  
representative.

\* \* \*

(if no further pages form a part of this Declaration,  
then end this Declaration with this page and check the following item)

☒ This declaration ends with this page.